

TYPE II DETERRENCE: KAHN and CON

"A civilized nation does not fight to the last woman and child."

--Herman Kahn

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The summary-analysis of hearings before the Subcommittee on Radiation, Joint Committee on Atomic Energy (June, 1959) paraphrased the testimony of one witness³ as follows:

1. The witness is not directly identified in connection with this passage, but the account mentions that "The witness distinguished between what he called Type I deterrence and Type II deterrence."

x Clues aside, the passages cited below will be recognized by anyone familiar with Herman Kahn's briefings on thermonuclear war.

"It is difficult for Americans to realize that, under certain circumstances, neither the Soviets nor the Europeans might believe that the United States would come to the aid of Europe. In making this point, the witness asked the subcommittee to ponder a hypothetical situation in which American defenses were so weak and Soviet retaliatory forces so strong that if the United States responded to a Soviet ground attack on Europe the Soviet counterretaliation would kill all 177 million Americans. Under such conditions, the witness said, it would not be surprising if neither the Europeans nor the Soviets found the U.S. promise to come to the aid of Europe credible." (p. 51).

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This is a statement of the central criticism of the massive retaliation threat. As a deterrent, it is widely held to be unreliable~~x~~ because ~~not~~ it is incredible, in view of the costs that would be entailed in carrying it out. Those who agree that the advent of a Soviet nuclear capability has nullified the effectiveness of our "Type II deterrence" (the deterrence of such "provocations" as an invasion of Europe by threat of a US first strike against Russia) disagree upon the best strategy for filling the gap. Some deprecate the need for ~~either~~ any deterrent, arguing that Russia has no desire to expand in Europe; or propose accommodations that would reduce her urge to expand, to a level that could be contained by lesser deterrents. (Thus, Kennan ~~suggests accommodations~~ suggests that, post-accommodation, the Russians could easily be deterred from invasion by pitchforks at the crossroads and the promise of an "unhappy stay.") Others propose alternative deterrents, less devastating but more credible, such as a conventional ground-fighting capability in Europe, or tactical

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The hearings identify the witness for a RAND audience, if not for the general reader, by mentioning that: "The witness distinguished between what he called Type I deterrence and Type II deterrence."¹

1. Reportedly, ~~in~~ some of the testimony of this witness was garbled in the summary of the hearings; but the particular passages cited here will be recognized quickly by anyone familiar with Herman Kahn's lectures on thermonuclear war.

The passage above is, of course, a familiar criticism of the massive retaliation threat. Because of the costs that would be incurred in carrying it out, this threat is widely regarded as insufficiently credible to be an effective deterrent. But those who agree that the advent of Soviet nuclear retaliatory capability has crippled the effectiveness of US "Type II deterrence" (the deterrence of such "provocations" as an invasion of Europe by threat of a US first strike against Russia) disagree upon the best means for repairing the gap.

nuclear weapons, or dispersed strategic weapons in the hands of our NATO allies.

Herman Kahn has argued, almost alone, that the solution is to preserve or reinstate the credibility of our Type II Deterrent threat; and that we should do this program of air defense and civil defense by undertaking an elaborate ~~of civil defense and civil defense~~ (including the capability for strategic evacuation of cities) to limit the damage the US would suffer from a first strike against a fully-alerted Soviet offensive system.¹

1. The core of this program would be the strategic evacuation of US cities to prepared shelters, this taking place during a crisis. Thus the Russians would have strategic warning, so that they could evacuate and put their forces on alert (if they didn't choose to pre-empt). Kahn presupposes that this means that some hundreds of Russian bombers or missiles would escape the US first strike; hence, he refers to his program as conferring a "moderate" first strike capability. But since he proposes to limit the damage done by these hundreds of vehicles to 10-20 million US dead, in, say, 1965, it would ^{not} appear that his program would ~~not~~ be "moderate" in cost.

In other words, he proposes to make the threat of a US first strike sufficiently credible to the Russians by lowering the costs of a first strike to the US, ~~lowering them to a point where the consequences of a first strike would be preferable to Russian domination of Europe.~~ ~~Our attitude is that deterrence in Europe is achievable (in particular, by a combination of deterrents alternative to the massive retaliation threat); and that even Type II Deterrence is possible (I will discuss elsewhere some aspects of its feasibility, its limits and dangers). But I have several reservations about the particular method by which Kahn proposes to augment Type II deterrence, only one of which will be raised here.~~ This concerns Kahn's measurement of the ~~US~~ costs of a US first strike.

The ^{main} problem, as Kahn defines it, ~~is to limit the US casualties which the Soviets would inflict in retaliation.~~ ^{paraphrased} The testimony cited above continues:

"But if it is true that the Soviets and the Europeans would not believe that we would honor our commitments to our allies if it meant 177 million American deaths, what level of casualties do they believe we would accept? It was stated that, to the extent that the Soviets believe we can keep our casualties to a level we would find acceptable, whatever that level may be, they will be deterred not only from attacking the United States directly, but also from very provocative aggressions, such as a ground attack on Europe. But, it was said, to the extent that they do not believe we can keep casualties to an acceptable level, the Soviets may feel safe in undertaking these extremely provocative military adventures."

Kahn premises a US first strike capability that would confer a "military victory" upon the US, ^{Kahn's} ~~in a~~ technical sense that it would leave the US with ^{the} capability utterly to devastate Russia, while Russia, matching its surviving offensive force against the surviving active air defenses in the US, would not have a comparable capability.)

Kahn then proposes that the US adopt as one of its strategic objectives, a military posture such that the consequences of a US first strike would be "acceptable" in the sense that they would be preferred to acceptance of an "Extreme provocation."¹

1. Kahn points out that a first strike capability so effective in limiting US damage that it might be used to redress even a "small" provocation, might itself be "provocative," hence dangerous.

The goal is, of course, to deter such "extreme provocations," by convincing the opponent that it would actually be rational for the US to strike rather than to accept the provocation. ~~Kahn recognizes that~~ ^(sufficiently credible to be) Strictly speaking, a deterrent threat may be effective even though it would appear somewhat irrational to carry out; the opponent will not be certain of the threatener's payoffs, he will not be certain that the threatener will act rationally, and he knows that the threatener might commit himself to carry out an otherwise irrational act. But Kahn argues that the US could not have high confidence that the threat would be sufficiently convincing to the Soviets unless it were demonstrably true that it would, in fact, be rational to carry it out. This means that losses must be kept below a level that would, in terms of US preferences, be "equivalent" to the loss involved in acceptance of the provocation. The "acceptable" level, then, will depend on the particular provocation to which it is being compared; and the example which Kahn typically uses as the prototype of an "extreme provocation" ~~would~~ is Russian domination by force of Western Europe. The task which he postulates for his proposed US strategic force, then, is to limit US ^{losses} ~~damage~~ from a first strike against an alerted enemy to a level where they would obviously be preferable to accepting Russian possession of West Europe.

In his briefings, and in his forthcoming book, Kahn refers directly to a chart ^{levels of} ~~of~~ which lists/United States deaths, from 177 million downwards, and challenges ~~the notion~~ the intuition of his audience to set the threshold. Would 50 million US dead be "acceptable"; if the alternative were Soviet possession of Western Europe? If not, how about 20-40 million? Not until the price gets below 20 million, he suggests, does the threat begin to look credible (the lower, the better, of course).

He next raises the question: Could US casualties be limited, with high confidence, to this "acceptable" level, whatever it is: say, in the neighborhood of 10 million US dead? He concludes that this might well be achieved, with a suitable program of civil defense, ^{offensive force,} and hardened active defenses; even though, by including strategic evacuation of cities, he must assume SU strategic warning of the attack and hence a good-sized ~~and~~ SU retaliatory force surviving. (This force would be capable of large-scale damage to US cities, though not to the dispersed and hardened US population. Kahn does not include ^{this} ~~these~~ on his chart of costs, partly because he considers ^{it} ~~them~~ of less importance, given the stockpiled and surviving capacity for rebuilding, but mainly because of the possibility of US post-attack blackmail. The US first strike he has in mind would leave SU cities relatively undamaged, to serve as hostages for US cities; our reserve forces would outweigh the surviving SU retaliatory forces and would threaten to outmatch them in a city-busting ~~and~~ exchange. ~~Finally, he proposes that the US aim at acquiring this capability.~~

also, crisis situation; US ultimatum

Obviously, one can raise questions about the cost of such a capability ~~and whether~~ or whether it is truly feasible at all; but let us accept the position that it could be achieved. The point ^{to which} I wish to draw attention ~~to here~~ is that this capability, as Kahn defines it in his briefings, is measured entirely by our ability to limit damage to US cities and populations. The question is not raised: What level of European casualties would we find acceptable? ~~under the given circumstances?~~

Kahn premises a US first strike capability that would confer a "military victory" upon the US, in his technical sense that it would leave the US with the capability utterly to devastate Russia, while Russia, matching its surviving offensive force against the surviving active air defenses in the US, would not have a comparable capability). Finally, he concludes that the US should ~~acquire~~ buy this capability.

~~Type II~~ Type II deterrence is only one approach for achieving deterrence of Russian provocations; and Kahn's program is only one way of strengthening Type II deterrence. (I will expand on the latter, rather unfamiliar point in a later section). In criticising his position, my reservations apply not to the general goals of deterrence or Type II deterrence but to Kahn's arguments for his particular approach to Type II deterrence, which focusses upon the radical limitation of US losses from a first strike.

My first points concern his ~~measur-~~ estimates of the losses to be expected from a first strike, given his program; these bear upon the feasibility of the goals he sets. Next I examine the whole concept of "acceptable losses" or "critical ~~losses~~ believe damage" and the notion of "provocation"; I ~~will argue~~ that Kahn's argument actually leads to setting operational goals unnecessarily high, thus underestimating the feasibility of Type II deterrence. Finally, I will consider some of the limits and risks to a ~~Type~~ policy of Type II deterrence, and possible countermeasures to it.

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II II

In his lectures on thermonuclear war, ^{Herman} Kahn bases his estimates of the feasibility of limiting damage to the US following a US first strike upon the results of ^{his} ~~the~~/RAND study on civil defense. But though these ~~estimates~~ ^{results} are presented as tentative and preliminary, their use in this context is possibly misleading.

Kahn himself makes the disarming statement in his first lecture, "We didn't bend over backwards on our assumptions." Their assumptions, in other words, were "reasonable or slightly pessimistic" rather than highly conservative. This is entirely appropriate in the context of this first lecture, or of the RAND study, both of which focus mainly upon the questions: "Is a thermonuclear war the end of history? Is it possible to alleviate the consequences of a nuclear catastrophe?"

Given that a war might occur, we are interested in comparing "war with civil defenses" to "war without civil defenses," and there is a prima facie case that civil defense would never worsen the outcome. The relevant question becomes: Might civil defense, under some circumstances, significantly improve the outcome? There is no compelling need to look at the worst possible circumstances or states-of-the-world (such as irrational attacks concentrating ^{initially} on population rather than on opposing strategic forces, or "worlds" in which genetic consequences of radiation turned out to be unpredictably bad, etc.), because even in such cases the outcome of the war with civil defense would be no worse than that without it. Where the relevant decision is merely whether or not to buy civil defenses (i.e., to buy "insurance" against the possibility that war might occur), it is sufficient to demonstrate that under some, sufficiently plausible, circumstances civil defense would make an appreciable difference. ~~The~~ This the study clearly indicated. Apart from the question of cost, then, "civil defense" can be shown to dominate "no civil defense," in the technical sense (i.e., under all the relevant circumstances that affect the outcomes of the two "strategies," civil defense never looks worse and sometimes looks better).

Thus, the civil defense study quite frankly: a) avoided extremely conservative assumptions; b) "lived with" estimates with considerable ranges of uncertainty; c) omitted consideration of many admittedly important factors. These practices were inevitable in a study with limited resources and, more important, were perfectly acceptable given the purposes of the project.^P But Kahn proceeds to use ~~his~~^{the} estimates of outcome produced by this study in support of his arguments for the feasibility of a credible threat of a first strike. The relevance of these figures to the decision whether or not to launch a nuclear first strike (as opposed to the decision whether or not to buy civil defense) is very questionable. The methods of estimation which were acceptable in connection with the "insurance" value of civil defense are not acceptable in connection with the decision to launch war: if the alternative is "no war." This is not merely because the latter decision is more weighty. The point is that neither of these alternatives will typically dominate the other. A conservative decision-maker must then look at conservative, high-confidence estimates of the "bad" or "worst" outcomes of each strategy under all relevant circumstances with significant likelihoods of occurring. (He must, of course, look conservatively at the "worst outcomes" of "no war" as well as at those of "war"). There is no presumption that "war with civil defense" would dominate "no war," ~~if~~ the latter were the alternative: on the contrary. Therefore, it is not enough to look for cases in which "war with civil defense" would be preferable; we must look hard at cases where it would be worse, asking "how much worse," and "how likely are these?" And this means looking at a great many factors that the civil defense study simply had no time for, and narrowing uncertainties which that study did not eliminate.

~~This is an exercise in the civil defense study~~

Kahn himself has spelled out the limitations of his study:

"Not only has the shelter program itself not been looked at except in a superficial way, but most of the other problems associated with preserving a civilization and a standard of living have not been looked at even superficially. While our study tried to survey these over-all problems--and in particular to ask the question, 'How would the country look 5 or 10 years after the war as a function of various preparations?'--we have scarcely scratched the surface. We

believe we have shown that it is very plausible, at least in the immediate future, that with cheap measures the United States would be a pretty good place to live in even a year after the war. However, we concede that the uncertainties are great enough to raise the question of sheer survival. The problem becomes more severe in the later time periods. Until the feasibility of recovery is settled, it will be difficult to arouse real interest in attempts to alleviate the consequences of war." (RM-2206-RC, p. 8)

Hence, the "major recommendation" of the project called for a \$200 million research and development program; "we are suggesting that it is possible to settle these questions relatively inexpensively." A study of the sort called for might conclude that the tentative conclusions of Kahn's civil defense study were quite realistic, even pessimistic; but it is necessary to keep in mind that this thorough study has not yet been done. This is no criticism of the civil defense study.

~~But if the limitations of that study are such that the limitations of that study weigh against a civil defense program~~ But if that study does not yet give us the assurance to ~~also for some~~ recommend spending more than \$500 million^{now} on civil defense, it would hardly give a decision-maker the assurance

But if ~~that study~~ all one can recommend on the basis of that ~~study~~ is a large program of R&D (plus a "cheap", ^{\$300 million} Starter Set program, ~~\$200 million~~), it is no use claiming that we know with high confidence what the results of that R&D will be. A civil defense program might reduce casualties in a US first strike from 80 million to ^{or} 25 or 10 million: ~~but~~ it might not. And that "might not" would weigh much more heavily upon the decision to launch war than upon the decision to spend money.¹

1. At this point, the "might not" aspect is, apparently, significant enough to constrain even the spending of money; since the \$500 million program is recommended in preference to more immediately ambitious programs.

^{is}
If a "moderate first strike capability" ~~were~~ to mean that the US could, with high confidence, keep casualties down to the 10-20 million dead level in the mid-sixties, I suggest that we are not yet in a position to recommend to the Air Force that it should adopt such a capability as an objective. To propose that ~~they~~ the Air Force should study the feasibility ^{and cost} of such a capability, is another story as a preliminary to considering it as a possible objective, would be another story (and perhaps this is all that Kahn has ever had in mind; though I'm not sure that he always makes this distinction clearly in his briefings ^{as in the RM cited above.})

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To increase the credibility of a US first strike in a certain situation is to lessen credibility of the effectiveness of the SU counterthreat in that situation. ~~effect of the SU~~
Kahn proposes to do that by a program to limit the ~~size of the~~ retaliatory strike upon the US population and cities. ^{But} So far, I have raised the point that we do not yet know with any assurance that ~~it would be~~ ^{the study would find it} possible to limit that damage to levels that Kahn has suggested might be regarded as "acceptable."¹ Not only must ~~we~~ ^{it} study

1. I should make clear that Kahn does not argue ~~strenuously~~ strenuously that 10-20 million dead would be an acceptable price to pay to break SU military power and to keep them out of Europe; he merely suggests that it would be "plausible" to the Russians and to our allies that we would accept this price.

Note that CD "withholds" as "insurance" even if it did not limit damage to any given level, so long as it would "make a difference."

more closely the "bad" end of the spectrum of possibilities, we must try to imagine

the strategies and capabilities which Russia might develop in response to ~~the~~ the Kahn program, ~~and~~ and the possible effectiveness of such countermeasures.

Given Russia's own need for Type I deterrence, the Kahn program would create a Russian requirement--which it does not now have--for the capability to kill more than 10 million Americans in dispersed shelters, speed not essential. There seems little basis for high confidence at this moment that they would not find a way to meet this requirement. ~~§~~

III

To increase the credibility of a US first strike is to lessen credibility of the effectiveness of the SU counterthreat in ~~that~~ ^{a given} situation. Kahn proposes to do the latter by a program that would restrict the ~~six~~ amount of damage to US population and cities the Soviets could threaten to inflict in retaliation. So far, I have raised the point that we do not yet know whether it would be possible to put a high-confidence ceiling upon this particular Russian counterthreat. Still, the civil defense study has given at least tentative indication that this might be possible. ~~Suppose that we~~ Let us suppose, from now on, that the US could limit, with the Kahn program, US casualties in a US first strike to the neighborhood of 10-20 million dead. Russia, then, we might suppose could not rely upon its threat to kill Americans to deter the US from striking, in response to a "provocation" such as an advance upon Europe. Presumably it would wish, nevertheless, to maintain its Type I deterrence in that situation. What ~~can~~ ^{could} it threaten to destroy in retaliation, once "prevented" from destroying US lives and assets?

Would not European lives and cities--which could be destroyed when US lives could not--enter into US values? Yet Kahn in his ~~brief~~ lectures ~~never considers~~ ~~the possibility~~ gives little if any attention to the possibility of a Russian retaliatory threat against West Europe, which his program admittedly does not (and probably could not) protect. His charts never raise the question: What level of European casualties would the US find acceptable?

Could we destroy IRBM's by CF?

^D
~~is~~ In protecting Europe from ~~Europe~~ Russian domination, would the United States be willing to fight to the last European? Does a civilized nation fight to its allies' last woman and child?

^D ^{most surely}
~~I am suggesting that~~ Russia could raise the threat (~~perhaps without explicit statement~~) ~~is~~ of annihilating Europe if the US should strike first against Russia.

~~That~~ That threat might become increasingly likely to arise if the Kahn program of civil and air defense became effective in the United States, ^{making it difficult to threaten US targets} The problem of a nation confronted with improving Type II Deterrence from its opponent is to boost its own Type I deterrent. Clearly, the best Type I deterrent for Russia is to threaten the cities and people of its potential attacker, ^{in this case} the United States. But if ~~Kahn should work~~ the United States should take steps to protect itself from ^{did} damage, the Soviet Union must look for ~~other~~ US values to threaten which ~~is~~ not fall under that protection. European cities and population ~~would~~ might serve.

Given that they would have the incentive to threaten Europe; would they have the capability to carry the threat out? The short distance to European targets means they can be attacked by IIRB's, light bombers and short-range missiles, of which the Soviet Union has many and can easily acquire more; It could be made very difficult even to make a dent in this capability in a US first strike aimed principally at the SU strategic force. Air defense in Europe is inevitably hampered by the short warning intervals, the possibilities for low-level attack, the numbers of vehicles that can be brought to bear, and the size and accuracy of the warheads deliverable at short distance. The concentration and overall density of European population might limit the usefulness of strategic evacuation. It would seem infeasible to limit significantly the Soviet capability to destroy Europe.

There remains the question whether the Soviets would carry out their threat.

~~Risk~~ If ~~the~~ US and/or NATO strategic weapons were still based in Europe, the Russians would certainly hit those. It would be a short step for them to hit these targets "sloppily," and ~~it would~~ we could hardly have high confidence that they would not do so. For this reason, Kahn recommends that we remove our strategic weapons from Europe.¹ It seems likely to me that this would make it much less rational for

Some (worried)
 1. Others who are ~~concerned~~ about the present weakness of the US Type II retaliatory threat recommend just the opposite: that we should encourage NATO nations to acquire their own strategic capabilities, perhaps by US gift. But such people are not concerned with increasing the credibility of a US strike; on the contrary, considering this threat beyond repair, they propose the alternate threat of European strategic retaliation.

the Russians to devastate Europe; moreover, I suspect that they would be somewhat inhibited from committing themselves publicly to a purely "spiteful" punishment. (They have made great propaganda capital out of our ~~stri~~ threat to retaliate primarily against Russian cities). ~~This might well be counted as among the advantages of~~ ^{an} Nevertheless, if the US adopted the posture that Kahn recommends, confronting the Soviets with a sizeable prospect of a US first strike and with their inability to cause many American deaths, the Russians might feel "forced" to accept the propaganda costs of a threat against Europe. And having made the commitment, the Russians should not find it very costly to carry it out, if the occasion should arise. Two points are important here:

a) The US having struck first, the Soviets would be facing military defeat (a premise of the Kahn program); an undamaged Europe would therefore remain under Western control. This lessens any Soviet incentive to preserve it as a prize for the victor.²

~~by~~ 2. Fred Ikle raises the interesting point that if the Soviets had already completed a land invasion of Western Europe, their threat to destroy the land held by their own troops would seem less credible. But this situation is not the one envisaged by Kahn; a threat to hit Russia if they did not withdraw, ~~at this point~~, would not seem highly reliable, and it is not clear that actually hitting Russia at this point would solve the problem of Russian possession of Europe: given the effect of Russian retaliation upon US ability for continued fighting. I will not go into these questions, which undoubtedly deserve attention.

6.

b) Carrying out their threat against Europe would not compete with the Russian objectives of ~~limiting damage~~ counterforce or population ~~and~~ strikes against US targets; different, non-competing vehicles are involved.

Kahn argues that in an important respect, hitting European targets would compete with the Russian goal of limiting damage to their own cities. He presumes that the ~~the~~ US first strike would have avoided Russian cities, so that these remained at stake, subject to destruction by our reserve forces. ~~However~~ Using post-attack blackmail, we would threaten to punish Russian cities for any damage to Europe. This is the main basis for Kahn's estimate that the Russians would be very unlikely to carry out their threat.

However, this seems to ignore the fact that the main reason for preserving Russian cities as hostages on a US first strike is to safeguard US cities, which also would remain at stake. As mentioned earlier, given the warning that Kahn presumes in the tense, crisis situation of the US evacuation, the Russians would retain a substantial ability to destroy US cities; and a major strike against European targets (using IRBM's, light bombers, short-range missiles, even atomic cannon) would reduce that ability scarcely at all. Is it ^{highly} plausible that the US would choose to expend its reserve forces to avenge the European targets, with its own cities still threatened?

Kahn maintains, notwithstanding these arguments, that the Russians are unlikely to carry out a threat to retaliate against Europe. The Europeans, if not our own policy-makers, will be concerned to know: How unlikely? It would be most distressing to a ~~Russian~~ European ally to feel that American policy was being founded upon a mistaken estimate of this probability. ~~to be able to threat would not strike one as a conservative, high-confidence estimate of this event~~

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This brings us to the crucial question: How big a risk of ~~their~~ carrying out this threat would the US be willing to "accept"?¹ How much, in terms of our values, would we stand to lose if they did "punish" Europe? ~~21~~ This will undoubtedly depend

1. This is equivalent to the question that Kahn poses in his briefings and his testimony; only here we are including European casualties among the costs.

on circumstances: e.g., the current state of our alliances in Europe (our forces might recently have been booted out on a wave of anti-American feeling, for example), and the the willingness of the Europeans themselves to assume a risk. More importantly it would depend on the alternatives open to the US. In the situation which Kahn is implicit in Kahn's analysis, ~~primarily considers~~, the issues are drawn sharply; the only alternative to a US first strike is ~~to accept~~ ~~the possibility of~~ Soviet ~~invasion and control~~ physical domination of Western Europe and its resources. ~~The~~ One of the primary goals of the Kahn program of civil defense, ~~counterforce~~ offensive force and active defense, is to reduce the losses suffered in a US first strike to a point where they would be preferable to acquiescence in Soviet control of Europe.²

2. He concludes that this is possible; but his measurement of losses includes only US damage. The question raised in this section is whether the first strike would still appear preferable when European losses are included.

Nowhere in this argument do I mean to imply that Kahn would take European losses, or the risk of them, lightly. He does not. But he weights very heavily the prospects for eventual domination of the US that he sees implicit in a Russian takeover in Europe. That outcome would seem, at the least, a serious possibility. On the other hand, I am not aware that a careful analysis of this situation has been performed: at ~~least~~ any rate, at RAND. The attitude that Russian victory would be certain and soon ~~done~~ ^(may) not do justice to the uncertainties surrounding delayed events ; it seems to minimize difficulties the Russians would have in organizing the new area or exploiting its production; nor does it examine the

capabilities of the US to respond to this challenge.

Given these uncertainties, the problem which ~~Kahn~~ ^(might confront) a US decision-maker who had relied upon the Kahn program of Type II Deterrence could be ~~might be~~ to choose between: a) acceptance of Soviet possession of Europe ~~(aspirated)~~ ~~known as, without serious opposition massive destruction in Europe)~~ a relatively undamaged Europe, with all its implications for the eventual fate of the US; (b) the destruction of Soviet military power by a US first strike, ^{incurring} ~~resulting in~~ 10-20 million US deaths and the virtual annihilation of Europe.

Some, ~~perhaps including Kahn~~, would say they would prefer to strike. ~~In their~~ In their eyes, the increased likelihood of Russian victory over the US, given ~~control~~ ^(control) ~~possession~~ of the people and economic resources of Europe, would outweigh the almost certain ~~loss~~ ^{immediate} ~~immediate~~ loss of 10 million American dead ~~and 200 million European~~ ⁽¹⁵⁰⁾ and a high likelihood of ~~200~~ ¹⁵⁰ million European dead. Such people might not ~~be~~ recommend that the US take responsibility for destroying Europe itself, ~~willing to take the enormous direct responsibility for destroying US-European~~ ^x ~~themselves~~, to keep it from the Russians.¹ Nevertheless, they would prefer to see

^(touted) 1. ~~Though~~ The widely-recommended strategy of initiating tactical nuclear war on the soil of Western Europe, in case of invasion, would come strikingly close to just this. Kahn is not in favor.

Europe devastated--by the Russians--than to see it in the hands of the Soviets.

~~Such people would not be deterred~~ If such a person were controlling US policy, his threat to strike first would deserve belief; ~~for~~ for he would not, in fact, be deterred by the Russian counterthreat.

Others would be.

The Russians might well believe that the latter group is likely to be in power. In that case, the US threat to strike first to prevent a takeover--despite the effectiveness of the Kahn program in limiting US damage--would not appear credible enough reliably to deter the Russians.

Meanwhile, incidentally, our allies would be making their own calculations.

8.

A particularly unpleasant position would be that of a European who ~~stated~~ concluded that: a) the Russians ~~did not believe that~~ were prepared to retaliate against Europe and believed that, knowing this, the US would be deterred from striking; while (b) the US did not, in fact, believe it, and was in any case not deterred from striking. If the alliance had not suffered previously, this thought would not strengthen it.

The specific Russian "provocation" we have been considering is Russian acquisition of Europe. (Nothing has been said of the manner in which they acquired it, except that force was involved). Kahn proposes that we weigh the costs of a first strike against the specific alternative of Soviet possession of Europe, with the ultimate threat that would imply. I would argue that the Kahn program, ~~if~~ ~~a~~ given the uncertainties of its protection to US population and cities and its lack of protection to European population and cities, does not reliably (or even very credibly) assure that a US first strike would ~~be~~ ^{appear} preferable to acceptance of this particular "provocation." ¹

1. After pondering this question for several days, Kahn reported that he ~~would~~ ~~not~~ himself could not recommend that 150 million European lives could be sacrificed--if that really ~~would~~ would be a consequence of a US first strike--merely to increase US security. That is, such a counterthreat would very seriously undermine the US Type II deterrence posture, even with the Kahn program.

On the other hand, Kahn's tentative conclusions were that: a) though consideration merely of US security and comfort could not overweigh the annihilation of Europe, consideration of the interest of non-US nations in freedom from Soviet domination might possibly do so; b) he would not be in favor of "allowing the Soviets to use Europe purely as hostages," i.e., (I take it) he would not be influenced by the Soviet counterthreat if ~~that~~ their retaliation upon Europe appeared purely "spiteful," non-rational (like a kidnapper's threat to kill one's child).

~~III~~ IV

Kahn argues that a US Type II deterrent threat would be sufficiently credible only if the consequences of a first strike appeared actually preferable to the consequences of "accepting" the "provocation" in question; and he suggests that 10-20 million US dead is the maximum "acceptable" loss as alternative to acceptance of Russian possession of Europe.

If it takes only 10-20 million US dead to deter the US from striking first, then the Russians can deter us. They can almost surely present us with an unacceptably high risk of suffering more than ~~10 million~~ that number of US casualties (given inevitable the ~~inevitable~~ uncertainties in our calculations), and they can certainly ~~add~~ (if they choose) add in to the costs ^{of} almost any degree of damage to West Europe.

Does this mean that Type II deterrence is unachievable; that a US threat to strike first cannot be credible? I think not; but we must depart from Kahn's premises to make it credible. The level of credibility which Kahn proposes for the Type II threat may well be ^{unattainable} ~~unachievable~~, but at the same time it may ~~have been~~ ~~set~~ be unnecessarily high.

For one thing, the requirement that it actually be rational for the US to carry out its threat is probably excessive. The US, unlike the SU, does not have a reputation for cold rationality to live down. On the contrary, both our allies and our enemies may have come to rely upon a certain romantic element of irrationality in US behavior. A cautious opponent could hardly assign 0 probability to an action we threatened, no matter how clear it seemed that deliberate, conservative calculation and ~~deliberation~~ must weigh against that action. Kahn places great ~~weigh~~ emphasis on the ability of the opponent to educate us quickly in a crisis, ~~if~~ Yet their opportunity would never have arisen had not our policy-makers proven, over the years, virtually ineducable. Could the Russians be confident that their briefing charts would penetrate when Kahn's had not? The fact is that the US capability for irrational, uncalculated, romantic action has been the mainstay of the US Type II

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deterrent posture for years; and that posture has probably ^{had its} ~~not been without~~ influence on Russian behavior.¹

1. Ironically, US capability for a first strike in that period--perhaps even now--may have approximated very well the capability that Kahn calls for. But the US decision-makers who would have had to order the strike ~~may~~ probably thought it would be irrational to do so ~~though~~ they might have done it.)

(And)

Still, one can sympathize with Kahn's desire to move away from reliance on the deep springs of irrationality in US decision-making. And as a matter of fact, there are considerations--of a sort that Kahn ~~never mentions~~ rarely mentions and never emphasizes--which might well make a US first strike appear rational (at the least, in the eyes of an outsider: which is what matters). These have to do with the possibility that, if the US does not choose to strike first, it would ~~eventually~~ eventually suffer a first strike by Russia.

Would the US ever contemplate a preventive war? As a coldblooded act in a period of ~~low~~ ^{no} tension, ^{it} ~~that~~ might appear ~~very~~ unlikely even to our enemies. But we are not talking about a period of no tension. Suppose that Russia is on its way to ^{conquer} ~~acquiring~~ Western Europe by force. This is the moment at which the US decision-maker is, by assumption, beginning to think of a US first strike. And at this moment, if never before, the thought must come into his mind: "If I don't strike now, what are the chances I will be struck tomorrow? Next year?"

Those chances will look higher "today" (when the Russians have started into Europe) than "yesterday"; the Russians have shown themselves determined to expand by force, and willing to take large risks. Moreover, their ability to launch a first strike will soon improve, with the acquisition of Europe. But even if these effects were absent, the ~~x~~ "incentive to preventive attack" which is nearly always present (though not usually effective by itself, in the absence of other "provocations") will be a motive for striking first additional to that provided by the imminent Russian takeover in Europe. The combination of these two motives might be effective where one alone would not be.

The incentive to a/US preventive attack depends/upon: a) ~~the~~ ^{partly} ~~the~~ ^{the} expectation that the ~~opponent~~ ^{SU} will strike first, if ~~one~~ ^{the US} does not; b) the advantage of striking first rather than striking second. Both of these tend to be positive most of the time. At any given moment, a US strategy of "don't strike" involves a risk of suffering a/future SU first strike; ~~when it~~ it also offers the possibility of peace, which will typically be overbalancing. But when ~~that prospect of peace~~ "peace" is tarnished by involving, for example, the loss of Europe, the attractiveness of "don't strike" is diminished. Taking into account ~~is~~ its concurrent risk, it would now be more plausible (even if it were not, in fact, true) that "strike" might look preferable.

It might be ~~argued that~~ that this "rationale" for a US first strike is implicit in Kahn's argument, even though he never mentions the incentives to preventive attack; ¹ he ~~does~~ certainly does not rule out such thoughts from a decision-maker's mind. As a matter of fact, however, it is ~~clear~~ not only clear that he is

2; His omission is deliberate; Kahn is concerned about being identified in any way with an apparent advocacy of preventive war. But this not only weakens substantially the case that can be made for the plausibility of a US first strike; it constrains his argument seriously and leads to ignoring a number of strategic relationships we will consider below.

Anyway, in discussing the incentives to preventive attack, I do not ~~expect~~ expect to be misunderstood as advocating it. I assume merely that these incentives exist, that they will become conscious during any crisis (if not before), and that they must make more plausible ~~a~~ the threat of a US first strike (which actually could not, I believe, be very plausible without them).

~~ex~~cluding such considerations from the discussion, but the whole nature of the argument changes when we include them. First, suppose that, at the moment when the Russians appeared ready to take over Europe, the US also assigned a ~~90%~~ 75% likelihood to a Russian first strike against the US in the immediate future? ^{highly} Could the Russians be/confident in this case that the US would be deterred from a first strike by the loss of 10-20 million US dead? That threshold clearly reflects an assumption that the Russian acquisition of Europe would be the only incentive to a US strike, that nothing would be gained by such a strike except European freedom. If that ~~threat~~ strike would also gain freedom from a high risk of suffering the

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consequences of striking second, a much higher level of US casualties might well appear "acceptable" to the US (whether it would be or not), in the eyes of our allies and enemies. And a US first strike would virtually always carry this advantage, in some degree; ~~depending~~ though the total contribution it would make to US incentives to strike would vary with the US expectation of an SU strike and with the technological advantages of striking first. ~~And~~ The higher the "acceptable" level of damage might be, the more ~~plan~~ feasible appears an air defense-civil defense program to limit damage to that level. (and the more useful a limited program!)

The A major reason for the implausibility of a US first strike without a preventive motive is that the uncertainties of nuclear war tend to transcend the uncertainties of ^{almost any} "peace"; thus, ~~the uncertainties of nuclear war~~ weigh ^{ing} heavily against a first strike strategy when the alternative is "no war." (See Part II, above). But in reality (a reality which is not discussed in the Kahn briefings) the alternative virtually never is "~~no war~~ ^{peace}"; it is a world which offers a greater or less^r probability of ^{war which opens} ~~war~~ with an SU first strike. (There will be strategy alternatives~~x~~ which reduce that probability; but the best of ~~these~~ ^{them} may not reduce it to 0). If that probability seems significantly large, then the uncertainties of nuclear war attach to all the US alternative strategies; they no~~x~~ longer prejudice the conservative decision-maker against the first strike. Given a powerful incentive to preventive attack, ~~the decision-maker will~~ in addition to the incentive of Soviet "provocations," the US decision-maker might not only be willing to "accept" a much higher expected level~~x~~ of damage than the one Kahn considers; he would be~~x~~ less influenced by the uncertainties surrounding that expected level (since those uncertainties would not seem more favorable to a second strike than to a first strike).

Let us take another look at~~x~~ the whole notion of "acceptable" levels of damage, or what Kahn has termed "critical damage": a level above which the US would be deterred from responding to a provocation by ~~xfir~~ a first strike. This notion--which is not peculiar to Kahn but which turns up, for example, in certain SOFS studies--implies a functional relationship between "provocations" (conceived as specific Soviet actions) and "acceptable damages". It suggests that ~~we look for~~

a specific

for a given provocation we can determine the "maximum price" the US would be willing to pay to "eliminate the source of the provocation." This

leads to argument of this form:

"Suppose

"A first strike would cost the US 40 million deaths. ~~xxThis is clearly not Kahn's takingxx~~ What provocation would be worth 40 million lives to reverse? The loss of Quemoy? No. Berlin? No. Europe? ...No. What then? ...A US first strike just couldn't look rational."

single space

Kahn might conclude from these premises that it was necessary to adopt a program that would reduce US casualties below 40 million. Others, less sanguine about the feasibility of ~~such a program~~ ^{this objective}, argue that a US first strike would simply not be a credible deterrent any longer. Yet both ~~would be~~ ^{are} ignoring the fact that the failure to strike first ~~is~~ ^{is a very large} might--in a specific situation--appear to entail a ~~significant~~ probability that the US would suffer 177 million deaths. That possibility could ~~indeed~~ ^{(even the near-certainty of even} make it plausible to an enemy that the US might find 40 million deaths preferable. To be sure, nothing else is likely to ^{and} (this is true, I suspect, even when "only" 10-20 million deaths are involved); But this is not a trivial case; ~~on the contrary~~ and the principle here is of wide application

1. There is an interesting side-issue here. It has been argued that a counterforce capability which held down US casualties from a first strike to 40 million could not significantly be provocative of an SU preventive strike, since the US would be most "unlikely" to strike first with such a force. The conclusion might be sound, but the argument seems faulty. Whether or not the US is "likely" to strike first depends not only the consequences of striking but upon the consequences of not striking; and the latter might include the possibility of 177 million dead. If (the SU estimated) the US assigned a high likelihood to an SU first strike, then for the US to buy vulnerable counterforce weapons which reduced its expected casualties in a first strike from 80 million to 40 million (without affecting the expected outcome of a second strike) could indeed make the US appear much more "likely" to strike first. And that calculation could trigger an SU preventive attack.

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preparations
for SU
1st strike

The point of view I am suggesting is that a specific Soviet action has a marginal effect upon the overall incentives of the US to strike first; and any meaningful threshold of "acceptable" damage ^{must} ~~should~~ be related to this overall incentive, not to any individual "provocation." It does not seem useful to determine the price we would pay to eliminate a given provocation on the assumption that we had no other incentive to strike, i.e., to trace the ^{particular} functional relationship mentioned above; For the effects of a combination of widely different considerations need not be additive. And in particular, it seems fruitless to consider ~~the~~ the US response to SU "provocations" in abstraction from any concurrent incentive to preventive attack: to put it another way, in abstraction from any fear that the Soviet Union might (in addition to these provocations) someday strike first.¹

1. Herman Kahn's reaction to these arguments, in conversation, was extremely interesting. Conceding, for the most part, the arguments in Parts II* and III above, as to the uncertainties and "side costs" of a US first strike, he asserted: "If I were certain that the Soviets would never strike first--i.e., if I were sure that there would be no nuclear war unless I started it--I would never strike first." (In the context of our discussion, this meant: even given the Kahn program of civil defense and air defense, and given Russian takeover, with conventional arms, of Europe, Asia, etc.). To me--as a close reader of nearly all Kahn's printed output--this came as a startling statement. (In later ~~conver~~ discussion, he seems to have backed away from this position. It remains highly significant that he ever said it.)

He admitted ~~on the same occasion~~ that he deliberately gave a contrary impression in his ~~brief~~ lectures and writings. (Nearly any listener to his three-day briefing would conclude that Kahn thought it feasible and desirable for the US to achieve ~~an~~ posture that would make it "rational" to strike first for no other reason than, say, to keep the Russians out of ~~Germany~~). Otherwise, he maintains, he would appear to the public to advocate either: ~~a~~ preventive war, or (if the incentive to a preventive attack should disappear) ~~the~~ surrender. ^{why?} The reason, he said, that he could not recommend a first strike that had no preventive aspect, (e.g., ~~given a 0 expectation of an SU strike~~), was precisely the uncertainties that surround any present calculation of the effects of a large nuclear war (such as his own civil defense study). "You'd have to be crazy," he put it, "to believe ~~anywhere~~ those paper calculations...that much."

had to do with

But, he emphasizes, an American President might just be that crazy.

(Kahn rather consistently neglects a third alternative: to ~~watch the Soviet~~ prepare to stop the Soviets on the ground.)

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Decisions have been taken ~~the~~ in the past that ignored uncertainties comparably large. If the first strike capability "looked good on paper," Kahn would regard it as adequately credible, even though a conservative decision-maker--like Kahn, or you or me--would never be willing to act on that basis.

"Some people" don't even want a pretense of a first strike capability. Kahn has often said. "Some would like a facade, but no more. I say we need much more than a facade." It turns out, ~~if the above views represent the "real" Herman Kahn, that he is~~ ~~is a facade, and the system he proposes would~~ still be a facade, if a "reasonable" man were President. It is a capability which ~~would~~ might induce a President "no more irresponsible than some we have had" to strike first, given Soviet provocation.

Moreover, it seems unlikely ~~that~~ a first strike could be made to appear preferable--even "on paper"--in the absence of any incentive to preventive attack.

I am glad to claim the above elucidation of Kahn's "real" views--whether or not it stands unmodified for long--as a major product of my researches ~~into this subject.~~
